## A Swing and A Miss

## Knuckleballs, Abstracted Affect, and the Glitch Art Process

Throwing the knuckleball in baseball is like making glitch art. If that already makes sense to you, you can stop reading now. The rest of this essay just unpacks the similarities.

You throw a knuckleball with your fingernails, not your knuckles or your fingertips. The goal is to throw a ball that doesn't spin at all. Weird aerodynamics occur on a non-spinning ball moving between 40-60 miles per hour. It bobs around unpredictably. A fastball pitcher hopes to blow the ball past the batter before he can hit it. A curveball pitcher hopes to control the ball so that it spins out of the way of the bat, tricking the batter into thinking the ball will continue in one direction, while purposefully moving the ball in another direction. A knuckleball pitcher hopes to throw a ball whose trajectory is utterly unpredictable to the batter. In order to do this effectively, a knuckleball pitcher himself is unable to predict where the ball will go. With a curve ball, the pitcher knows its sneaky trajectory and hopes that the batter won't guess it. With a knuckleball, nobody really knows. The knuckleball is a risky pitch, a collaboration with the chaos of non-linear aerodynamic physics. It's a John Cage pitch. When it works, it's like magic: no one can hit it, and everyone strikes out. When it doesn't work, it's like a catastrophe; it either fails to dance and just lobs so that everyone can hit, or it's so out of control that everyone gets walked.

Really, Jackson Pollock paintings are kind of knuckleballish. It's not that he didn't know what he was doing (he did), it's just that he purposefully allowed the physics of paint viscosity, gravity, and centrifugal force to have a say in how his paintings turned out. All material has its own agency. All artists know this. To cut with or against the grain of the wood? To collaborate with the agency of the materials or to fight them? Beaux Arts, modernist architecture, and Miley Cyrus audio recording engineers all try to control and master the agency of their materials. Glitch artists (in ways similar to Pollock and Cage) allow the agency of their materials more free reign.

Not that the materials ever have complete free reign. Complete free reign of digital materials results in what has been called "the wild glitch," a glitch event that merely happens and is captured by a human who happens to observe it. But even then, did the wild glitch even (a crash, a buggy screen display, a corrupt digital TV signal) just happen in the wild? Is there even such a thing as a "digital wild," a "digital nature"? Or is the digital realm (networks, hardwares, softwares) already a collaboration of human culture, human economics, and natural materials? When you get right down to it, are Pollock's paints even "natural?" Are the dice that John Cage rolled and the i-ching he consulted while composing his pieces "natural?" Hasn't all art (analog and digital) always already been a collaboration of the agencies of "natural" and "cultural" forces? Yes. Because we (computers, sand, aleatory, abstract expressionist painters) all share the same world.

The agency of digital materials is particularly unique, however. Digital media are able to abstract certain lived affects that aren't usually abstractable via traditional analog media. For instance, 3D Google maps separate the visual surface of the environment from its underlying 3D volumetric dimensions. These two data sets are stored separately and then sutured together during runtime. Another example: the glitch art practice of datamoshing takes advantage of a certain video compression algorithm that separates the abstract vectors of video motion (its bones?) from the surface visuals of the video image (its skin?). Glitch artists working with digital media mung it up at a root level, well beneath its mimetic visual surface. Glitch artists tweak digital media at its functional, material level (sometimes by tweaking code, sometimes by tweaking hardware). In this sense, glitch artists are similar to structural/materialist film makers (working with the substrates of

their medium rather than treating it as some sort of magic, mimetic surface on which float mere narrative symbols).

Back to the knuckleball analogy, glitch artists mung up root-level media in ways they are not altogether able to fully control. Like knuckleball pitching, glitch artmaking is not about achieving predictable outcomes (unless the outcome you are predicting is unpredictability). In this sense, glitch artists are like analog photographers experimenting with the (only semi-controllable) solarization process. They are like ceramicists working with (only semi-controllable) glazes, kiln temperatures, and kiln placements.

The "aesthetic" results of glitch art are often bizarre in ways that are new and uncanny in the history of analog painting, sculpture, and film (although not without precedent). Glitch artists enter a strange new dialogue with newly abstract(ed) material properties (motion vectors abstracted from one event and wrapped in the visual skin of another event, blank underlying volumetric 3D space abstracted from one city block and wrapped in the surface skin of another city block). Artists who datamosh and databend video, corrupting its source compression algorithms in various ways, are able to modulate video well beyond the standard analog film techniques of wipe, fade, jump-cut, and superimposition.

All this focus on uncanny, root-level tweaking makes it seem like glitch artists aren't concerned with the aesthetic visual results of their processes, but nothing could be further from the truth. Glitch artists care a great deal about what the work ultimately looks like. Primarily, it can't look merely mimetic. It can't look like what the medium looked like prior to the glitch process, or else it wasn't much of a glitch process. Likewise, a knuckleball pitcher is quite open to the ball traveling in any number of trajectories, as long as one of those trajectories is NOT a trajectory the batter is able to predict. In this sense, glitch artists and knuckleball pitchers create systems that invite the unintended: they intend the unintended and do not intend the intended.

Glitch artists and knuckleball pitchers both develop an affective feel for the right approach, because neither are simply throwing strikes in the strike zone. In baseball, there are two ways to throw a strike: 1) Throw it in the strike zone without the batter hitting it, or 2) Throw it anywhere you like, so long as the batter is lured into swinging at it without being able to hit it. Knuckleball pitchers rely on approach #2 (because they can't control the ball enough to guarantee approach #1). Likewise, glitch art is a lure to the uncanny. This is why glitch art doesn't have to be the result of a "real/true" "wild" glitch event. It just has to get the viewer swinging. Because neither glitch art nor baseball are science (although the "wildness" of physics plays a part in both).

So what does "getting the viewer swinging" look like? To return to some classic ideals, Glitch art seems to have more to do with Kant's idea of the sublime than his idea of beauty. It has even more to do with Freud's idea of the uncanny (unhomelike). Glitch art is something we recognize and think we are able to pin down just as it veers off into something that terrifies, delights, or baffles us. As long as we humans don't know quite what to expect from glitch art (or the machines and networks that are its medium), it will continue to lure and confound us, we will keep swinging at it, and it will keep striking us out. Glitch art in ten years won't look visually like glitch art does today, because we will have become used to what it looks like today, and because our machines and networks will have gotten even more strange and entangled with us. So new realms of the uncanny will have to be explored. But these realms will reveal themselves to us as we continue to (ab)use these machines in the world we share with them. From this perspective, glitch as a kind of artistic process will always be with us, because it has always already been with us, long before bugs flew into mainframe computers.

Artists have always had an affective feel for their materials -- its agencies and peculiarities. Why should the materials of hardware, software, and networks be any different? From this perspective, glitch artists are just artists who approach computers as normal art material. Glitch art currently seems novel simply because so many people have wrongheadedly approached computers as something other than what they actually are. People have thought of computers as immaterial virtual worlds and as pristing/errorless mathematical/metaphysical realms. And so people have used

worlds and as pristine/erroriess mathematical/metaphysical realms. And so people have used computers to make spreadsheets and *Die Hard 5*. Really though, computers are just material stuff in the world -- language, sand, electricity, logic, tubes, light, sound. Like the knuckleball, glitch art isn't voodoo or magic. It's just one more instance of the immanent world freaking us out.